The Streaming Video Technology Alliance

IETF 119 MOPS Update

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General Updates

2023 EOY Update

New Streaming Audio Study Group
A new Streaming Audio Study group to explore technical challenges with streaming higher audio profiles.

Players and Playback Elevated
The Players and Playback Group has moved from a Study Group to a full-fledged Working Group.

SEGMENTS
We launched our first public-facing, one-day conference focused on operations. SEGMENTS:2024 (2/14) call for speakers is open.

Common Media Library
First ever public repo for shared functionality across js players.

Open Caching Performance Data

SVTA University
Launched an online technical university with Streaming Advertising 101 and CMCD 101. Open to the public.

Streaming Video Wiki
Continue to fill the Wiki with relevant streaming video content. Can be found at wiki.svta.org.

Document Numbering
Launched an SVTA document number convention and updated all published documents.

2023 Highlights
Network Overlays Impact to Streaming

- New discussion topic @ SVTA
Network Overlays change Network Policies

- Example Alternate Network Policies to the Underlying "native" Network
  - Routing changes
    - Alternate Ingress/Egress paths
  - Protocol/Application Specific Routing changes
  - DNS changes
    - DNS Resolver choice:  1.1.1.1 -> 8.8.8.8
    - DNS Protocol Choice:  DNS/53 -> DoH
    - Change DNS policies:  Protocols supports, Results Returned, Private Zones
  - Address Changes
    - Provide Alternate Addressing for Nodes

- Overlay & Policy Changes MAY NOT be visible to Applications
Application Protocol Overlay Impacts

Network Policies maybe different for different protocols

icmp, traceroute, HTTPS, DNS might take this Route

While HTTP Traffic takes this Route

Different Protocols see different perspectives of the network
Policy changes may not be visible to Applications
Example Impact: Different CDN Cache Selection, Different Latencies

MASQUE Overlay

Ingest → Egress

Internet(Transit)

ISP Network

User Device

HTTP Content

HTTPS QUIC

Content Service + CDN Caches

Video Operator Service

 MASQUE Flow
 Non-MASQUE Flow

latency x

latency y
Next steps

- SVTA has begun an impacts identification & analysis paper
- Hope to have first draft ready for IETF120

Initial impact areas include:
- Discovery/Communication of Network Policy
- Latency Impacts
- Problems measuring latency when protocols take different paths
- IP Address Assignment/Association
- CDN Cache Selection